ABSTRACT OF THE DISCLOSURE

[0078] A method and system for fitting a multichannel cochlear implant system to a patient increases the percentage of patients for which stapedial reflexes can be obtained, and increases the accuracy of predicting the "live speech" comfort levels of the patient's fitting programs from the stapedial reflex. Electrical stimuli are applied on multiple electrodes at "live speech" pulse rates. The neural excitation patterns elicited from such stimulation more closely resemble that which occurs when the system is subjected to normal speech patterns. By progressively setting threshold levels in bands, e.g., groups of electrodes, either overlapping or non-overlapping, as well as with a final check by globally adjusting the band obtained contour to the stapedial reflex, such values more closely resemble actual "live speech" program levels than those obtained with traditional methods. Further, broader excitation patterns produced by the activation of multiple electrodes increases the probability of obtaining reflex measurements where single electrode stimulation fails due to sparse neural survival.